

APPENDIX I MEASURES FOR BETTER HEALTH--A SUMMARY

Throughout this report a number of specific measures have been identified as important to improving the health of individuals. Summarized in this Appendix are the principal recommendations for healthier infants, children, adolescents and young adults, adults and older adults.

In most cases, issues which span several age groups are discussed for the age group at greatest risk for the problem addressed. However, for those issues in which the nature of the problem varies by life stage (e.g., nutrition), the recommendation is repeated with a different emphasis for each age group.

HEALTHY INFANTS

Education for parenthood. People who are well informed about the care required by infants can better plan and prepare for parenthood. Prospective parents can seek education for parenthood classes through physicians, hospitals, and community organizations. Schools can offer preparation for parenthood to children and teenagers.

Genetic counseling. Prospective parents who have a history of family disorders such as Down syndrome, Tay-Sachs disease, sickle cell anemia, hemophilia, muscular dystrophy, or serious mental disorders should seek special counseling. Health professionals can provide this information to their patients and make appropriate referrals for genetic services.

Prenatal care. Good prenatal care is essential for a healthy pregnancy. Medical care, dietary assistance and counseling is important for all expectant mothers. Mothers with social and economic

barriers to such care can be targeted by outreach and follow-up programs.

Prenatal nutrition. Pregnant women have extra needs for iron, protein, calcium, and calories and may need to be provided with dietary suggestions and/or supplements. Nutritional guidance and services are available from health professionals and service agencies.

Prenatal maternal habits. To reduce the potential for adverse effects on the developing fetus, women should avoid tobacco and alcohol during pregnancy. Counseling and appropriate services can help expectant mothers who wish to avoid these risks. Similarly, physicians should avoid prescribing use of medications and exposure to radiation by pregnant women, unless warranted by special circumstances.

Amniocentesis. A test (amniocentesis) sampling the intrauterine fluid at about the 16th week of pregnancy can determine whether certain serious birth defects exist in the fetus. Expectant mothers at higher risk include those who: are 35 and over; have a history of multiple spontaneous abortions; or have a family history of Down syndrome, neural tube defects, inherited metabolic disorders, multiple birth defects, or sex linked inherited disorders. Detection of an abnormality may require a personal decision about an abortion.

Breast feeding. Breast milk is the most complete form of infant nutrition and is recommended for full-term newborn babies, unless there are specific problems or breast feeding is unsuccessful. If a nursing mother is healthy and well nourished, fluoride and possibly Vitamin D may be the only supplements needed by the baby. After about four months iron may also have to be added. Solid foods should not be introduced hastily into the baby's diet--rather they should be phased in gradually.

Pediatric care. Regular, comprehensive pediatric care can help assure the early detection of preventable problems, and provide preventive

services such as immunizations (see below). In addition to a detailed examination after birth, every baby should be examined before leaving the hospital or within 10 days of birth, and again at approximately two, four, six, and nine months of age.

Immunizations. Childhood diseases that can be prevented by vaccinations continue to be a threat to infant health. Babies should be immunized for diphtheria, pertussis, tetanus, and polio at ages two months, four months, and six months (polio immunization is optional at six months). They should also receive the recommended childhood immunizations thereafter.

Social services. Some families require special support services to enhance the healthy growth and development of their children. Such services include high quality day care, improved foster care and adoption programs, as well as services to assist families in which a parent may suffer from chronic disabling disease, mental illness, alcoholism, or drug abuse.

HEALTHY CHILDREN

Early childhood development. A stimulating and healthy environment during the early part of life can enhance a child's growth and development. Programs such as Head Start, which provide comprehensive services for children, including day care, health care, nutrition, education and counseling, have produced important gains in child development, particularly for families with low incomes.

Special support services. Special sources of support should be available through community agencies and health care providers to assist children and families under particular stress. Foster care programs and practices should be designed to increase the opportunities for children to grow up in a stable and healthy environment.

<u>Injury reduction</u>. Accidents are the single greatest threat to children's health. People can reduce children's risk of injury and death by:

- having the child secured in an approved child carrier, safety harness or seat belt when riding in an automobile;
- storing toxic agents out of reach, away from food, and in special containers with fastened safety caps;
- ensuring against access to knives and guns;
- carefully supervising young children at play, particularly when they are near water or streets;
- instructing the child what to do in situations of special risk (e.g., stoves, matches, electrical sockets, traffic).

Pediatric care. Some childhood problems can be prevented or ameliorated through the provision of certain medical sevices. Examples of such services include: identification and treatment of vision and hearing problems; assessment of developmental skills important to learning; immunizations (see below); and early diagnosis and treatment of childhood infections. Children should, therefore, receive routine pediatric evaluations at least every two to three years.

Immunizations. Children should be immunized for diphtheria, pertussis, tetanus, and polio at ages two months, four months, six months, 18 months, and four to six years (polio immunization is optional at six months), and for measles, mumps, and rubella at age 15 months.

Nutrition and exercise. Acquiring healthy eating and exercise habits in childhood may have lifelong benefits. An appropriate balance of food intake and physical activity promotes normal weight. Excessive intake of salt, sugar, and fats should be

avoided. Parents and schools can emphasize these points through instruction, meal planning, and physical education programs emphasizing lifelong exercise activities. Nutrition supplements can be provided to children in high risk families.

Healthy habits. Preparing young children for peer group pressures with regard to smoking, alcohol use, drug use, and sexual activity can enhance their ability to deal with those pressures later. Parents, schools, and health professionals are all important to the provision of comprehensive health education which can help children to acquire skills to cope with problems they will confront as teenagers.

Fluoridation. The most effective and efficient way to prevent tooth decay is through fluoridation of community water supplies. If the water supply is not fluoridated, alternative fluoride sources can be provided through school-based fluoride mouth rinse or tablet programs, fluoride rinsing services from dentists, fluoride tablets for home use.

Dental care. Children should be taught proper tooth brushing and flossing techniques at early ages, and should begin regular visits to a dentist by age three. Sweets in the diet should be limited to prevent tooth decay.

HEALTHY ADOLESCENTS AND YOUNG ADULTS

Roadway safety. Autombile accidents are the leading cause of death among young people. A substantial number of injuries and deaths could be avoided through careful, defensive driving habits. Especially important are avoiding driving after drinking (or riding with a driver who has been drinking) or use of mood-altering drugs; obeying traffic laws; and using seat belts or, for cyclists, helmets. These efforts can be reinforced by Federal, State, and local measures to set and enforce safety regulations and lower speed limits, and to improve roadway and vehicular design.

Smoking, alcohol, and drug use. Experimental behavior by young people can lead to dependence or misuse of certain substances. Collective measures can be taken by parents, teachers, health professionals, and community organizations to provide adolescents and young adults with information and skills necessary to help them avoid cigarette smoking or harmful use of alcohol or drugs.

Nutrition and exercise. Changes in values and social pressures may encourage adolescents to eat snack foods that do not contain adequate supplies of essential nutrients. Yet, good eating habits and regular, vigorous exercise are important to still growing adolescents. During their growth spurt, teenagers need more calories, and particularly more protein, calcium, and iron.

Family planning. Unwanted pregnancy is a distressing problem for adolescent and young adult women in this country. Families, schools, health professionals, and social organizations can ensure that information about birth control measures is provided to young people of both sexes, and that family planning services are easily accessible to those who are sexually active. Services (including continued schooling) can also be made available in the community for young women who become pregnant and are in need of care and advice.

Sexually transmissible diseases. Sexually transmissible diseases that affect large numbers of young people are preventable. Families, schools, health professionals and social organizations can help provide information, confidential counseling, and treatment to prevent the transmission of venereal diseases. Periodic screening for disease which may not be symptomatic can be obtained from private physicians and community clinics. encouraged for sexually active young people. Clinic personnel, sex educators, and family planning services counselors can stress the value of condoms in reducing the spread of disease and can emphasize the importance of informing partners immediately if disease is discovered.

Immunization. Young people should receive a booster immunization for diphtheria and tetanus at age 15.

Mental health. Young people frequently experience periods of frustration, uncertainty, and confusion, and should be encouraged to talk over problems with people with whom they can be open. Alert and sensitive friends, family members, clergy, or counselors at school or work can be helpful during periods of stress, anxiety, depression or uncertainty. Hotlines may also be helpful. Mental health professionals may be needed if conditions persist.

<u>Firearms</u>. Handguns are involved in a substantial number of homicides, suicides and accidental deaths in this country. Actions at the individual, community, and governmental levels can provide measures to reduce the availability of handguns.

HEALTHY ADULTS

Smoking. Cigarette smoking is the principal preventable cause of chronic disease and death in this country. Public education efforts at the Federal, State, and local levels, as well as health professionals, can provide information about the health hazards of smoking and suggestions on how to stop. Those who cannot quit on their own may benefit from one of the organized smoking cessation clinics. Those who are unable or unwilling to stop ought to smoke brands low in tar and nicotine, to inhale less, to smoke their cigarettes only half way, and to reduce gradually the number of cigarettes smoked.

Alcohol. Misuse of alcohol leads to accidental injury, family disruption, and chronic disease for millions of Americans. It is important that people realize the dangers--particularly for pregnant women--when alcohol is used excessively. Individuals (or their families) with alcohol-related problems may find effective assistance from health professionals, the clergy, community groups such as

Alcoholics Anonymous, or programs run by various businesses to assist employees with drinking problems.

<u>Nutrition</u>. Good nutrition is an essential component of good health. People should adopt prudent dietary habits, consuming:

- only sufficient calories to meet body needs (fewer calories if the person is overweight);
- less saturated fat and cholesterol;
- less salt;
- less sugar;
- relatively more complex carbohydrates, such as whole grains, cereals, fruits and vegetables; and
- relatively more fish, poultry, legumes (e.g., peas, beans, peanuts), and less red meat.

Employers, food advertisers, grocery stores, and health and social service agencies can add to the promotion of healthy nutritional habits by providing the information and access to foods necessary to a good diet.

Regular exercise can bring physical Exercise. and psychological benefits. Adults should be encouraged to exercise vigorously--if possible, at least three times a week for about 15 to 30 minutes Caution should, however, be taken to each time. initiate activity gradually, and anyone over 40, or with a health problem of any kind, should consult a physician before beginning a vigorous exercise program. The importance of regular and sustained exercise for adults should be stressed in public information programs and by health professionals. Communities and employers can encourage fitnessrelated programs, including, where practical, the provision of facilities or pathways to make bicycling, running, and other exercise safer and more convenient.

Environmental health. Toxic agents in our environment can present health hazards which may not be detected for years. Private and public actions at all levels are important to protect against possible environmental hazards. Individuals can support the monitoring of industrial and agricultural production processes to reduce exposure to potentially toxic agents.

Worksite health and safety. The occupational setting is important both as a source of potential health hazards and a site for health promotion activities. Health programs at the worksite can provide information and protection related to all potential workplace hazards for employees, including stress, as well as offer activities and services to promote healthier lifestyles. People should both encourage these programs and take advantage of them.

Hypertension. High blood pressure affects millions of Americans and is a major contributor to heart disease and stroke. Adults should have a screening exam for high blood pressure at least every five years, and every two to three years if over age 40. If hypertension is discovered, and medication prescribed, it is important that people follow their therapeutic regimens carefully.

Pap smear. The Pap smear is an important tool to detect cervical cancer at early stages. Women should have three Pap smears taken one year apart beginning at age 20, or at the beginning of sexual activity. Thereafter, a Pap smear should be taken every three years to age 35, then every five years to age 60, then every three years. Screening frequency should be increased if any abnormalities are found, or if a woman is taking oral contraceptives or estrogen therapy.

Breast examination. Self-examination is the most effective way to detect breast cancer at an early treatable stage. Women should examine their

own breasts monthly, after the menstrual period, for early signs of cancer (lumps, abnormal discharge, irregular size). Post-menopausal women should select a specific day of the month for such self-examination. Health professionals and public health education programs can provide information and instruction on breast self-examination, and increase their efforts to disseminate this important information. Periodic screening by mammography is not needed until after age 50, except for women who have already had cancer in one breast, and after 40 for women with a family history of breast cancer.

Cancer signs. Some cancers present signs at early stages in which the chances for successful treatment are greater. People should watch for early signs of cancer and consult a physician if any are noticed. In addition to the signs for breast cancer noted above, other cancer signs include: changes in bowel or bladder habits; a sore that does not heal; unusual bleeding or discharge; difficulty swallowing; change in a wart or mole; or nagging cough or hoarseness (American Cancer Society's seven cancer signs).

Mental health. Many people suffer from various forms of emotional disorders or mental illness. It is quite common for people to become, at one time or another, uncommonly anxious, depressed, or have difficulty coping with a life event. Professional assistance may be helpful if particular difficulty is encountered and may be available through health professionals, employers, local media, community organizations, hospitals, telephone hotlines, and other outreach organizations.

Dental care. People frequently lose their teeth prematurely because of poor dental and gum care. Adults should take care of their teeth with daily brushing and flossing and an annual dental examination.

HEALTHY OLDER ADULTS

Work and social activity. Employment and/or volunteer opportunities are important for older people accustomed to working. Maintaining an active social life is also important to their good health. Older people should remain active socially, avoid isolation, and maintain ties with family members and friends. Community health and social organizations can facilitate group activities for older people, when possible, in community centers.

Exercise. Regular physical activity for older adults can provide physical and psychological benefits, as well as help maintain flexibility and balance important to preventing falls. Older adults should therefore engage in exercise, such as daily walks, regularly.

Nutrition. Older people have certain special dietary needs. Regular, nutritious meals are important and particular care should be taken to include vegetables, sources of iron, calcium, and fiber, and use more fish, poultry, and legumes than red meat as sources of protein in the diet.

Preventive services. Some problems associated with aging can be detected and corrected at early stages. Older adults should have health check-ups at least every two years until age 75, and every year thereafter. The following should be performed each time: blood pressure check (with follow-up and treatment, if warranted), hearing and vision exam, breast exam for women, urinalysis, and hematocrit (measurement of red blood cells). At less frequent intervals women should have Pap smears, and all should have stool examined for blood. When possible, these and other preventive services such as foot care, dental care and dietary guidance should be provided at a single location.

Medication. Older people frequently receive too much medication. Often, fewer kinds of medications and lower dosages will suffice. Patients should ask their physicians to regularly review the medications

they are taking. They should also request that medication be prescribed by its generic name, whenever feasible.

Immunization. Every year, many older adults die or are incapacitated unnecessarily due to influenza or pneumonia. Older people can consult their physicians about immunization against these diseases.

Home safety. Falls are the leading cause of accidental injury and death among older adults. People and agencies responsible for housing for the elderly can provide such home safety measures as ample lighting, sturdy railings and steps, non-slip floor surfaces, and fire protection and detection measures.

Services to maintain independence. For those whose activity is limited, often relatively minor services can help older people maintain their independence. People should encourage programs and services to help avoid unnecessary institutionalization. Examples include programs for: safe and affordable housing; dietary assistance through group meals and home meals; communications and transportation services; recreation and education opportunities; in-house services such as homemaker, visiting nurse and home health aides care; reading aids; and access to advice and services from appropriate health professionals.

APPENDIX II SOURCES OF ADDITIONAL INFORMATION

Additional information about various health promotion and disease prevention activities is available from a number of sources. This section lists representative sources of information, grouped by the 15 activity areas introduced in Section III. Both government agencies and private, non-proifit groups are listed. These agencies and organizations comprise only a portion of the total possible sources. Many other qualified sources of such information exist, including State and local health agencies which generally provide a comprehensive repository of consumer-oriented health information. Most groups listed offer free or low cost literature. The Surgeon General does not necessarily endorse the statements or viewpoints of the organizations listed.

PREVENTIVE HEALTH SERVICES

Family Planning

 National Clearinghouse for Family Planning Information

6110 Executive Blvd., Suite 250 Rockville, Maryland 29852 (301) 881-9400

• <u>Planned Parenthood Federation of America, Inc.</u>

810 Seventh Avenue New York, New York 10019 (212) 541-7800 • National Family Planning and Reproductive Health Association, Inc.

Suite 350 425 Thirteenth Street, N.W. Washington, D.C. 20004 (202) 783-1560

 American College of Obstetricians and Gynecologists

> Resource Center Suite 2700 1 East Wacker Drive Chicago, Illinois 60601 (312) 222-1600

Pregnancy and Infant Care

• Office of Maternal and Child Health

Program Services Branch
Bureau of Community Health Services
Health Services Administration
Room 7A20, Parklawn
5600 Fishers Lane
Rockville, Maryland 20857
(301) 443-4273

National Foundation -- March of Dimes

Public Health Education Department 1275 Mamaroneck Avenue White Plains, New York 10605 (914) 428-7100, ext. 298

 American College of Obstetricians and Gynecologists

> Resource Center Suite 2700 1 East Wacker Drive Chicago, Illinois 60601 (312) 222-1600

• American Academy of Pediatrics

1801 Hinman Avenue Evanston, Illinois 60204 (312) 869-4255

Immunizations

Center for Disease Control

Bureau of State Services Technical Information Services Center for Disease Control Atlanta, Georgia 30333 (404) 452-4021

• National Institute of Child Health and Human Development

Office of Research Reporting Room 2A34, Building 31 National Institutes of Health Bethesda, Maryland 20205 (301) 496-5133

Sexually Transmissible Diseases

Center for Disease Control

Bureau of State Services Technical Information Services Center for Disease Control Atlanta, Georgia 30333 (404) 452-4021

American Social Health Association

260 Sheridan Avenue Palo Alto, California 94306 (415) 321-5134

National Operation Venus

1213 Clover Street Philadelphia, Pennsylvania 19107 (800) 523-1885

High Blood Pressure and Heart Disease

• National High Blood Pressure Information Center

Suite 1300 7910 Woodmont Avenue Bethesda, Maryland 20014 (301) 652-7700

National Heart, Lung, and Blood Institute

Public Inquiries Office Room 4A21, Building 31 National Institutes of Health Bethesda, Maryland 20205 (301) 496-4236

American Heart Association

7320 Greenville Avenue Dallas, Texas 75231 (214) 750-5300 (or local chapters)

• Consumer Information Center

Consumer Information Center Pueblo, Colorado 81009 (303) 544-5277, ext. 370

HEALTH PROTECTION

Toxic Agent Control

Center for Disease Control

Chronic Diseases Division Bureau of Epidemiology Building 1, Room 5127 Center for Disease Control Atlanta, Georgia 30333 (404) 329-3165

Environmental Protection Agency

Office of Public Awareness Environmental Protection Agency 401 M Street, S.W. Mail Code: A-107 Washington, D.C. 20460 (202) 755-0700

National Institutes of Health

National Institute of Environmental Health Sciences Post Office Box 12233 Research Triangle Park, North Carolina 27709 (919) 541-3345

American Lung Association

1740 Broadway New York, New York 10019 (212) 245-8000 (or local chapter)

Occupational Safety and Health

 Occupational Safety and Health Administration

Office of Public and Consumer Affairs U.S. Department of Labor (Room N3637) 200 Constitution Avenue, N.W. Washington, D.C. 20210 (202) 523-8151

• Clearinghouse for Occupational Safety and Health

National Institute for Occupational Safety and Health Center for Disease Control Robert A. Taft Laboratory 4676 Columbia Parkway Cincinnati, Ohio 45226 (513) 684-8326

National Safety Council

444 North Michigan Avenue Chicago, Illinois 60611 (312) 527-4800

• American Industrial Hygiene Association

475 Wolf Ledges Parkway Akron, Ohio 44311 (216) 762-7294

American Occupational Medical Association

Suite 2240 150 North Wacker Drive Chicago, Illinois 60606 (312) 782-2166

Accidental Injury Control

• Consumer Product Safety Commission

Consumer Education and Awareness Division 5401 Westbard Avenue Washington, D.C. 20207 (202) 492-6576 (or local Poison Control Centers)

• Department of Transportation

General Services Division (NAD-42)
National Highway Traffic Safety
Administration
Department of Transportation
400 Seventh Street, S.W. (Room 4423)
Washington, D.C. 20590
(202) 426-0874
ATTN: E. Kitts

National Safety Council

444 North Michigan Avenue Chicago, Illinois 60611 (312) 527-4800

• American Red Cross

National Headquarters 18th and E Streets, N.W. Washington, D.C. 20006 (202) 857-3555

Community Water Supply Fluoridation

• Center for Disease Control

Dental Disease Prevention Activity (E107) Center for Disease Control Atlanta, Georgia 30333 (404) 262-6631

• National Institute of Dental Research

Public Inquiries Office Room 2C34, Building 31 National Institutes of Health Bethesda, Maryland 20205 (301) 496-4261

American Dental Association

Bureau of Health Education and Audiovisual Services American Dental Association 211 East Chicago Avenue Chicago, Illinois 60611 (312) 440-2593

Infectious Agent Control

Center for Disease Control

Public Inquiries Management Analysis and Service Office Building 4, Room B2 Center for Disease Control Atlanta, Georgia 30333 (404) 329-3534

National Institute of Allergy and Infectious Diseases

Office of Research Reporting and Public Response Room 7A32, Building 31 National Institutes of Health Bethesda, Maryland 20205 (301) 496-5717

HEALTH PROMOTION

Smoking Cessation

 Technical Information Center for Smoking and Health

Office on Smoking and Health
Department of Health, Education, and
Welfare (Room 1-16, Park Building)
5600 Fishers Lane
Rockville, Maryland 20857
(301) 443-1690

• Office of Cancer Communications

National Cancer Institute Room 10A18, Building 31 National Institutes of Health Bethesda, Maryland 20205 (301) 496-5583

• American Cancer Society

Public Information Department 777 Third Avenue New York, New York 10017 (212) 371-2900, ext. 254 (or local chapter)

American Lung Association

1740 Broadway New York, New York 10019 (212) 245-8000 (or local chapter)

American Heart Association

7320 Greenville Avenue Dallas, Texas 75231 (214) 750-5300 (or local chapter)

Reducing Misuse of Alcohol and Drugs

• National Clearinghouse on Alcohol Information

Post Office Box 2345 Rockville, Maryland 20852 (301) 468-2600

 National Clearinghouse on Drug Abuse Information

> Room 10A53, Parklawn Building 5600 Fishers Lane Rockville, Maryland 20857 (301) 443-6500

National Council on Alcoholism

733 Third Avenue New York, New York 10017 (212) 986-4433

Alcoholics Anonymous

General Services Office (6th Floor)
468 Park Avenue South
New York, New York 10016
(212) 686-1100
ATTN: Public Information Department

Improved Nutrition

Food and Drug Administration

Office of Consumer Communications (HFG-10)
Food and Drug Administration
Room 15B32, Parklawn Building
5600 Fishers Lane
Rockville, Maryland 20857
(301) 443-3170

• U.S. Department of Agriculture

Human Nutrition Center - SEA Room 421A U.S. Department of Agriculture Washington, D.C. 20250 (202) 447-7854

Consumer Information Center

Consumer Information Center Pueblo, Colorado 81009 (303) 544-5277, ext. 370

Nutrition Foundation

Suite 300 888 Seventeenth Street, N.W. Washington, D.C. 20006 (202) 872-0778

National Nutrition Education Clearinghouse

Suite 1110 2140 Shattuck Avenue Berkeley, California 94704 (415) 548-1363

Exercise and Fitness

 President's Council on Physical Fitness and Sports

> Department of Health, Education and Welfare (Room 3030 Donohoe) 400 Sixth Street, S.W. Washington, D.C. 20201 (202) 755-7947

 American Alliance for Health, Physical Education, Recreation, and Dance

> Promotions Unit 1201 Sixteenth Street, N.W. Washington, D.C. 20036 (202) 833-5534

American College of Sports Medicine

1440 Monroe Street Madison, Wisconsin 53706 (608) 262-3632

Stress Control

• National Clearinghouse for Mental Health Information

National Institute of Mental Health Room 11A21, Parklawn Building 5600 Fishers Lane Rockville, Maryland 20857 (301) 443-4515

Mental Health Association

1800 North Kent Street Arlington, Virginia 22209 (or local chapters) (703) 528-6405

• Public Affairs Committee, Inc.

Room 1101 381 Park Avenue South New York, New York 10016 (212) 683-4331

Blue Cross and Blue Shield Associations

Public Relations Office 840 North Lake Shore Drive Chicago, Illinois 60611 (312) 440-5955

GENERAL INFORMATION SOURCES

Public Health Service

• Bureau of Health Education

Building 14 Center for Disease Control Atlanta, Georgia 30333 (404) 329-3111

• Office of Health Information and Health Promotion

Office of the Surgeon General
Department of Health, Education,
and Welfare (Room 721B HHH)
200 Independence Avenue, S.W.
Washington, D.C.
(202) 472-5370

National Organizations

• National Association of Community Health Centers, Inc.

Suite 420 1625 Eye Street, N.W. Washington, D.C. 20006 (202) 833-9280

National Center for Health Education

211 Sutter Street (4th Floor) San Francisco, California 94108 (415) 781-6144

State and Local Levels

- Contact your family physician
- Contact your local health department
- Contact your county's cooperative extension service

ACKNOWLEDGEMENTS

Preparation of this report was coordinated by the U.S. Public Health Service's Office of Disease Prevention and Health Promotion, directed by J. Michael McGinnis, M.D., Deputy Assistant Secretary for Health. Contributions were made by a wide variety of agencies and individuals, listed below. Special acknowledgement should be given to the Institute of Medicine of the National Academy of Sciences, which developed a series of scientific background papers for the report, as well as to the Center for Disease Control and the National Center for Health Statistics, which contributed substantially to the development of the data and tables contained in the report.

<u>Participating Agencies</u>. The following Federal agencies contributed to preparation and review of the report:

Public Health Service (HEW)

Alcohol, Drug Abuse, and Mental Health Administration Gerald Klerman, M.D., Administrator

Center for Disease Control William H. Foege, M.D., Director

Food and Drug Administration Donald Kennedy, Ph.D., Commissioner

Health Resources Administration Henry A. Foley, Ph.D., Administrator

Health Services Administration George I. Lythcott, M.D., Administrator National Center for Health Statistics Dorothy P. Rice, Director

National Institutes of Health Donald S. Fredrickson, M.D., Director

Office of Health Planning and Evaluation James Mongan, M.D., Deputy Assistant Secretary for Health

Office of Population Affairs Irvin M. Cushner, M.D., Deputy Assistant Secretary for Health

Office of Public Affairs Michael F. White, Director

Office of Research, Statistics and Technology Ruth S. Hanft, Deputy Assistant Secretary for Health

Office on Smoking and Health John M. Pinney, Director

Department of Agriculture

M. Rupert Cutler, Ph.D. Assistant Secretary for Conservation, Research and Education

Carol Tucker Foreman Assistant Secretary for Food and Consumer Services

Department of Labor

Eula Bingham, Ph.D. Assistant Secretary for Occupational Safety and Health

Department of Transportation

Joan Claybrook, Administrator National Highway Traffic Safety Administration

Department of the Treasury

Richard J. Davis Assistant Secretary for Enforcement and Operations

Consumer Product Safety Commission

Susan B. King, Chairman

Environmental Protection Agency

Douglas M. Costle, Administrator

<u>Contributors</u>. The following individuals contributed materials to the development of the manuscript:

Irwin L. Auerbach, Program Analyst, Environmental Protection Agency

Norman W. Axnick, Director, Office of Program Planning and Evaluation, Center for Disease Control, U.S. Public Health Service

Clement Barbaza, Printing and Reproduction Management Branch Chief, Office of Management, Office of the Assistant Secretary for Health, U.S. Public Health Service (production assistance)

Katharine Bauer, Senior Advisor, Office of Health Information, Health Promotion and Physical Fitness and Sports Medicine, U.S. Public Health Service

Alexander Cohen, Ph.D., Chief, Behavioral and Motivational Factors Branch, Division of Biomedical and Behavioral Science, National Institute for Occupational Safety and Health, Center for Disease Control, U.S. Public Health Service

Ralph Cosham, Editorial Consultant, Office of Health Information, Health Promotion and Physical Fitness and Sports Medicine, U.S. Public Health Service

Audrey T. Cross, Nutrition Policy Coordinator, Office of the Secretary, U.S. Department of Agriculture

Paul Danaceau, Editorial Consultant, Office of Disease Prevention and Health Promotion, U.S. Public Health Service

Winthrop N. Davey, M.D., Director, Bureau of Training, Center for Disease Control, U.S. Public Health Service

Ervin E. Duggan, Special Assistant to the Secretary, Department of Health, Education, and Welfare

Lawrence Farer, M.D., Director, Tuberculosis Division, Bureau of State Services, Center for Disease Control, U.S. Public Health Service

Barry Felrice, Acting Associate Administrator for Plans and Programs, National Highway Traffic Safety Administration, Department of Transportation

Allen Forbes, M.D., Director, Nutrition and Consumer Sciences, Food and Drug Administration, U.S. Public Health Service

David Fraser, M.D., Chief, Special Pathogens Branch, Bacterial Diseases Division, Bureau of Epidemiology, Center for Disease Control, U.S. Public Health Services

Frank Frodyma, Operations Research Analyst, Occupational Safety and Health Administration, Department of Labor Lawrence Galton, Editorial Consultant, Office of Disease Prevention and Health Promotion, U.S. Public Health Service

John C. Greene, D.M.D., Deputy Surgeon General, U.S. Public Health Service

Michael B. Gregg, M.D., Deputy Director, Bureau of Epidemiology, Center for Disease Control, U.S. Public Health Service

Stephen W. Havas, M.D., Medical Advisor, Office of Health Information, Health Promotion and Physical Fitness and Sports Medicine, U.S. Public Health Service

John W. Horm, Statistician, Demographic Analysis Section, Biometry Branch, National Cancer Institute, National Institutes of Health, U.S. Public Health Service

Juel Janis, Ph.D., Special Assistant to the Assistant Secretary for Health and Surgeon General, U.S. Public Health Service

Vicki Kalmar, Professional Associate, Division of Health Promotion and Disease Prevention, The Institute of Medicine, National Academy of Sciences

Martha Katz, Special Assistant to the Acting Deputy Assistant Secretary for Health, Office of Disease Prevention and Health Promotion, U.S. Public Health Service

Samuel S. Kessel, M.D., Robert Wood Johnson Foundation Fellow, Office of the Assistant Secretary for Health, U.S. Public Health Service

Ronald J. Kostraba, Technical Services Specialist, Administrative Services Center, Office of Management, Office of the Assistant Secretary for Health, U.S. Public Health Service (cover design) J. Michael Lane, M.D., Director, Bureau of Smallpox Eradication, Center for Disease Control, U.S. Public Health Service

Seth N. Leibler, Ed.D., Deputy Director, Bureau of Training, Center for Disease Control, U.S. Public Health Service

Frank S. Lisella, Ph.D., Program Development Branch, Environmental Health Services Division, Bureau of State Services, Center for Disease Control, U.S. Public Health Service

Brian J. McCarthy, M.D., Family Planning Evaluation Division, Bureau of Epidemiology, Center for Disease Control, U.S. Public Health Service

J. Donald Millar, M.D., Director, Bureau of State Services, Center for Disease Control, U.S. Public Health Services

Sanford Miller, Ph.D., Director, Bureau of Foods, Food and Drug Administration, U.S. Public Health Service

Catherine Milton, Special Assistant to the Assistant Secretary for Enforcement and Operations, Department of the Treasury

John E. Mounts, Publications Branch Chief, National Center for Health Satistics, U.S. Public Health Service

Elena O. Nightingale, M.D., Ph.D., Director, Division of Health Promotion and Disease Prevention, The Institute of Medicine, National Academy of Sciences

Godfrey P. Oakley, Jr., M.D., Chief, Birth Defects Branch, Chronic Diseases Division, Bureau of Epidemiology, Center for Disease Control, U.S. Public Health Service

Horace G. Ogden, Director, Bureau of Health Education, Center for Disease Control, U.S. Public Health Service

Jennifer Peck, Social Science Analyst, Bureau of the Census, Department of Commerce

Earl S. Pollock, Sc.D., Chief, Biometry Branch, National Cancer Institute, National Institutes of Health, U.S. Public Health Service

Thomas W. Poore, Chief, Text Preparation Section, Publications Branch, National Center for Health Statistics, U.S. Public Health Service

Kate Prager, Sc.D., Statistician, Mortality Statistics Branch, Division of Vital Statistics, National Center for Health Statistics, U.S. Public Health Service

Robert Proctor, Public Affairs Officer, Office of Public Affairs, U.S. Public Health Service

Robert L. Ringler, Ph.D., Deputy Director, National Institute on Aging, National Institutes of Health, U.S. Public Health Service

Don Robinson, Printing Specialist, Printing and Reproduction Management Branch, Office of Management, Office of the Assistant Secretary for Health, U.S. Public Health Service (production assistance)

Harry Rosenberg, Ph.D., Chief, Mortality Statistics Branch, Division of Vital Statistics, National Center for Health Statistics, U.S. Public Health Service

Lisbeth Bamberger Schorr, Chairperson, Select Panel for the Promotion of Child Health

Roger Sherwin, M.D. Associate Professor, Department of Epidemiology and Preventive Medicine, University of Maryland James W. Stratton, M.D., Medical Officer/Prevention Planning, Office of Program Planning and Evaluation, Center for Disease Control, U.S. Public Health Service

Susan B. Toal, M.P.H., Instructional Systems Specialist, Bureau of Training, Center for Disease Control, U.S. Public Health Service

Dennis D. Tolsma, M.P.H., Program Analysis Officer, Office of Program Planning and Evaluation, Center for Disease Control, U.S. Public Health Service

Carl W. Tyler, M.D., Director, Family Planning Evaluation Division, Bureau of Epidemiology, Center for Disease Control, U.S. Public Health Service

William Walton, III, Acting Director, Office of Strategic Planning, Consumer Product Safety Commission

Basil Whiting, Deputy Assistant Secretary, Occupational Safety and Health Administration, Department of Labor

Ronald W. Wilson, Chief, Health Status and Demographic Analysis Branch, Division of Analysis, National Center for Health Statistics, U.S. Public Health Service

David Wu, Program Analyst, Office of Health Information, Health Promotion and Physical Fitness and Sports Medicine, U.S. Public Health Service

Reviewers. The following individuals provided review and comments for the development of the manuscript:

Herbert K. Abrams, M.D., M.P.H., Director of the Arizona Center for Occupational Safety and Health, Arizona Health Sciences Center, University of Arizona

Duane Alexander, M.D., Assistant to the Director, National Institute of Child Health and Human Development, National Institutes of Health, U.S. Public Health Service

John R. Ball, M.D., J.D., Senior Policy Analyst, Office of Science and Technology Policy, Executive Office of the President

Robert Benedict, Commissioner, Administration on Aging, Office of Human Development Services

George A. Bray, M.D., Nutrition Coordinator, U.S. Public Health Service

Lester Breslow, M.D., M.P.H., Dean, School of Public Health, Center for the Health Sciences, University of California at Los Angeles

John H. Bryant, M.D., Deputy Assistant Secretary for International Health, U.S. Public Health Service

Benjamin T. Burton, Ph.D., Associate Director, National Institutes of Arthritis, Metabolism, and Digestive Diseases, National Institutes of Health, U.S. Public Health Service

Kathy Buto, Policy Coordinator, Executive Secretariat, Office of the Secretary, Department of Health, Education, and Welfare

C. Carson Conrad, Executive Director, President's Council on Physical Fitness and Sports, U.S. Public Health Service

Richard Cotton, Executive Secretary, Department of Health, Education, and Welfare

Charles L. Cox, Assistant to the Director of the Bureau of Radiological Health, Food and Drug Administration, U.S. Public Health Service

James F. Dickson, III, M.D., Senior Advisor for Environmental Affairs, U.S. Public Health Service

Allen Duncan, Assistant for Program Operations, Office of Health Affairs, Food and Drug Administration, U.S. Public Health Service

Kenneth Flieger, Special Assistant to the Acting Associate Commissioner for Health Affairs, Food and Drug Administration, U.S. Public Health Service

Calvin Frederick, Ph.D., Chief, Disaster Assistance and Emergency Mental Health Section, Division of Special Mental Health Programs, National Institute of Mental Health, Alcohol, Drug Abuse, and Mental Health Administration, U.S. Public Health Service

Peter L. Frommer, M.D., Deputy Director, National Heart, Lung, and Blood Institute, National Institutes of Health, U.S. Public Health Service

Carol W. Garvey, M.D., Acting Chief Medical Officer, Office of Primary Care, Bureau of Community Health Services, Health Services Administration, U.S. Public Health Service

Stephen E. Goldston, Ed.D., M.S.P.H., Coordinator for Primary Prevention Programs, National Institute of Mental Health, Alcohol, Drug Abuse, and Mental Health Administration, U.S. Public Health Service

David A. Hamburg, M.D., President, The Institute of Medicine, National Academy of Sciences

Stephen P. Hersh, M.D., Assistant Director for Children and Youth, National Institute of Mental Health, Alcohol, Drug Abuse, and Mental Health Administration, U.S. Public Health Services

Richard N. Hill, Acting Director, Health Effects and Science Policy, Office of Toxic Substances, Environmental Protection Agency Mary Jane Jesse, M.D., Director, Division of Heart and Vascular Diseases, National Heart, Lung, and Blood Institute, National Institutes of Health, U.S. Public Health Service

George M. Kingman, Director, Office of Program Planning and Evaluation, National Institute of Environmental Health Sciences, National Institutes of Health, U.S. Public Health Service

Charles Krauthammer, M.D., Special Assistant to the Administrator, Alcohol, Drug Abuse, and Mental Health Administration, U.S. Public Health Service

George A. Lamb, M.D., Associate Professor, Department of Preventive and Social Medicine, Harvard Medical School

Mildred K. Lehman, Director, Office of Communications and Public Affairs, Alcohol, Drug Abuse, and Mental Health Administration, U.S. Public Health Service

Mark H. Lepper, M.D., Vice-President of Evaluation, Rush Medical Center, Chicago, Illinois

Charles U. Lowe, M.D., Director, Office of Child Health Affairs, U.S. Public Health Service

Bernard R. McColgan, Chief, Prevention Branch, National Institute on Drug Abuse, Alcohol, Drug Abuse, and Mental Health Administration, U.S. Public Health Service

Carolyn G. McHale, Head, Program Information Section, National Eye Institute, National Institutes of Health, U.S. Public Health Service

Laura A. Miller, Special Assistant to the Secretary, Department of Health, Education, and Welfare

Lulu Mae Nix, Ed.D., Director, Office of Adolescent Pregnancy Programs, Office of the Assistant Secretary for Health, U.S. Public Health Service

Mark Novitch, M.D., Acting Associate Commissioner for Health Affairs, Food and Drug Administration, U.S. Public Health Service

Gilbert S. Omenn, M.D., Ph.D., Associate Director for Human Resources and Social and Economic Services, Office of Science and Technology Policy, Executive Office of the President

Seymour Perry, M.D., Associate Director for Medical Applications of Research, National Institutes of Health, U.S. Public Health Service

Blandina Ramirez, M.D., Commissioner, Administration for Children, Youth and Families, Office of Human Development Services

Renie Schapiro, M.P.H., Staff Fellow, Office of Health Affairs, Food and Drug Administration, U.S. Public Health Service

Marvin Schneiderman, Ph.D., Associate Director for Science Policy, National Cancer Institute, National Institutes of Health, U.S. Public Health Service

John R. Seal, M.D., Deputy Director, National Institute of Allergy and Infectious Diseases, National Institutes of Health, U.S. Public Health Service

Cliff Sessions, Deputy Assistant Secretary for Public Affairs, Department of Health, Education, and Welfare

Zekin Shakhashiri, M.D., Special Assistant to the Chief, Office of Program Planning and Evaluation, National Institute of Neurological and Communicative Disorders and Stroke, U.S. Public Health Service

Laurel C. Shannon, Special Assistant to the Associate Administrator for Planning, Evaluation, and Legislation, Health Resources Administration, U.S. Public Health Service

L. David Taylor, Deputy Assistant Secretary for Management Analysis and Systems, Office of the Secretary, Department of Health, Education, and Welfare

Howard R. Veit, Director, Office of Health Maintenance Organizations, Office of the Assistant Secretary for Health, U.S. Public Health Service

Graham W. Ward, M.P.H., Chief, Health Education Branch, Office of Prevention, Education, and Control, National Heart, Lung, and Blood Institute, National Institutes of Health, U.S. Public Health Service

Lois G. Whitley, Deputy Director, Division of Prevention, National Institute on Alcohol Abuse and Alcoholism, Alcohol, Drug Abuse, and Mental Health Administration, U.S. Public Health Service

Sidney C. Wolverton, Acting Associate Administrator for Program Coordination, Alcohol, Drug Abuse, and Mental Health Administration, U.S. Public Health Service

* U. S. GOVERNMENT PRINTING OFFICE 11979 297-780